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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,124	09/18/2003	Chiao-Chung Huang	250122-1020	7157

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EXAMINER

LEE, LAURA MICHELLE

ART UNIT	PAPER NUMBER
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3724

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary

Application No.

10/667,124

Applicant(s)

HUANG ET AL.

Examiner

Laura M. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/18/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments see page 2, lines 10-15, filed 8/18/2007, with respect to the rejection(s) of claim(s) 1-4 under Sato et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sato et al.
2. Applicant's arguments see page 4, lines 1-4, filed 8/18/2007, with respect to the rejection(s) of claim(s) 1 under Raizk and Borisov have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Raizk and Borisov.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (U.S. Patent 5,060,548), herein referred to as Sato. Sato discloses an apparatus (circular saw) for splitting a test piece (wood) comprising: a base (base, 1) with a centerline (groove between members 20/21 as shown in Figure 10A; additionally although the groove is not labeled, Figure 11 discloses the circular passing through the base, indicative that a groove between 20/21 exists); two pillars (fence 3 and 3, see

Figure 6) disposed on the base separated by a fixed first interval to support the test piece, wherein a connection line between the pillars (3/3) is perpendicular to and divided equally by the centerline; and a sliding piece (guard, 37) disposed on the base (1) (via support 7, see Figure 9) and slidable (via slot and knob 44/38 along the centerline, wherein the sliding piece has two fingers (left and right side of the blade guard, 37; Figures 10A/ 18) parallel to the centerline separated by a second interval, which is smaller than the first interval, and the connection line between the tips of the fingers is perpendicular to and divided equally by the centerline.

In regards to claim 2, Sato discloses wherein the base has two pivot points (threaded bolts and bolt holes, shown, but not numbered in Figure 10A) at the both sides of the centerline to install the pillars (3).

In regards to claim 3, Sato discloses wherein the pivot points (Figure 10A, not numbered) are separated by the first interval, which is divided equally by the centerline.

In regards to claim 4, Sato discloses wherein the base has a straight groove (groove between members 20/21 as shown in Figure 10A; additionally although the groove is not labeled, Figure 11 discloses the circular passing through the base, indicative that a groove between 20/21 exists), and the sliding piece has a protrusion (blade, 17) movable in the groove along the centerline.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raizk, et al (U.S. Patent 3,157,235), herein referred to as Raizk in view of Borisov et al. (SU 197708), herein referred to as Borisov and in further view of.

In regards to claim 1, Raizk discloses an apparatus for splitting a test piece, comprising: a base (38; Figure 3) with a centerline (the longitudinal axis of the dropping bar, 21); two pillars (32/33) disposed on the base (38) separated by a fixed first interval to support the test piece (35), wherein a connection line between the pillars (32/33) is perpendicular to and divided equally by the centerline; and a sliding piece (breaking tip, 23) disposed on the base (via vertical legs 11) slidable along the center line (by pinion, 31 and corresponding teeth, 24);

Raizk discloses one finger, but does disclose that the sliding piece has two fingers parallel to the centerline separated by a second interval, which is smaller than the first interval, and that the connection line between the tips of the fingers is perpendicular to and divided equally by the centerline. However, attention is directed to the Borisov device that discloses stock braking machine with two symmetrical shoulders (2) equidistant from the stops. Borisov discloses that the use of the two shoulders improves the broken stock surface quality by eliminating compressive stress in the break zone. It similarly would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the Raizk device to have utilized two fingers (2) as taught by Borisov on the sliding member (23) instead of just the one to

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improve the broken test piece surface quality. Additionally, it is noted that although the combination of the Borisov and Raizk device would incorporate the shoulders on the moving member, instead of the non-moving member as taught by Borisov, one having ordinary skill in the art would have recognized that providing the shoulders on the moving or non-moving member (i.e. reversing the four reaction points) would still provide an equal although opposite reaction (i.e. breaking) force on the center of the beam, that would still enable the device to perform the identical, equivalent splitting function. Additionally, it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 16 and that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raizk in view of Borisov and in further view Applicant Admitted Prior Art (AAPA).

The modified device of Raizk, discloses the steps of:

providing a test piece (35) having a working surface with a target point (breaking point;

fixing the test piece on the base (38) with the working surface contacting the pillars (32/33);

moving the sliding piece (23), such that the fingers contact the test piece; and pushing the sliding piece to split the test piece along the predetermined line by the fingers of the sliding piece (23) and the pillars (32/33).

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Raizk does not disclose forming two slits separated on the working surface and therefore does not disclose that the slits are aligned with the target point in a predetermined line and with the centerline of the base. Although it is old and well known to pre-stress / pre-score an test piece to enable the piece to fail first at the desired location, the applicant also admits, as shown in Figure 1A and 1B of the specification that it is old and well known to first pre-score the workpiece along the desired split line before applying pressure to break the workpiece. The score lines provide a weakened zone in the workpiece that will fail first, aiding the workpiece to break at the desired location. It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided a score line in the workpiece at the desired break line as already admitted by applicant to be old and well known in the art, to aid in breaking the workpiece along the desired break line.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Lee whose telephone number is (571) 272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LML
10/15/2007



BOYER D. ASHLEY
SUPERVISORY PATENT EXAMINER